memorandum

DATE: September 2, 1999

REPLY TO: Office of Nuclear Safety Policy and Standards: R. J. Serbu: 301-903-2856

SUBJECT: Revision to DOE Technical Standards Program Strategic Plan

TO: DOE and DOE Contractor Technical Standards Managers
DOE Topical Committee Chairpersons
Technical Standards Program Office Staff

Attached to this memorandum is a copy of the revised Strategic Plan for the DOE Technical Standards Program (TSP). The updated plan reflects input received from the Technical Standards Managers' Committee.

This document will be posted on our TSP Web site.

R. J. Serbu, Manager

Richard Hech

DOE Technical Standards Program, EH-31

Attachment (TSP Strategic Plan, August 1999)

cc (w/att): R. L. Black, EH-31

DOE Technical Standards Program Strategic Plan (Revised – August 1999)

Vision

Department of Energy (DOE) activities are performed in accordance with recognized and accepted technical standards. Department and contractor personnel participate in the development and maintenance of voluntary consensus standards adopted for use by DOE facilities, projects, and programs. In addition, agency-specific standards deemed necessary to support Department operations are developed and maintained within a management system that reflects the practices and procedures of private-sector standards developing organizations. Consequently, DOE's implementation of standards management policy/requirements contained in Public Law 104-113 and OMB Circular A-119 is considered "best-in-class" within the Executive branch of the Federal Government.

Mission

In support of the *Department Standards Program* (DOE/EH-0416), the Technical Standards Program (TSP) facilitates DOE's continued transition to a standards-based culture by:

- promoting the use of voluntary consensus standards,
- managing Department efforts to develop needed technical standards, and
- communicating information on technical standards activities to standards developers/users and program stakeholders.

Goal 1

Promote a culture that routinely integrates technical standards (voluntary consensus standards preferred) into the performance of work.

- 1.1 Support the Department Standards Committee (DSC) in its efforts to develop a comprehensive standards program (environment, safety, and health focus) and obtain DOE/EH management commitment for program implementation.
- 1.2 Establish formal working relationships with other DOE "standards" management programs (DOE/EE Codes and Standards Program, DOE Information Technology Standards Program, etc.) to effect a comprehensive Department-level standards program that implements Public Law (PL) 104-113 and OMB Circular A-119 for all DOE elements.
- 1.3 Inform and educate the DOE community about the advantages of using technical standards.
- 1.4 Ensure that information on voluntary consensus standards and DOE technical standards (both existing standards and standards under development) is readily available to Department and contractor personnel.
- 1.5 Promote the concept of "strategic standardization" through program resources.

- The DOE Strategic and Operating Plans recognize the importance of standards and identify organizational goals and strategies that promote a standards-based operating culture.
- "Strategic standardization" is a recognized management tool (example: ANSI training on application of SSM principles) in the business plans of every DOE element.
- Standards management activities within DOE (i.e., TSP, DSC, DOE/EE, DOE IT Standards, etc.) are formally integrated (through reorganization, MOU, or a "Standards Management Council") to promote a more uniform/consistent approach to standards identification, development, use, and maintenance within DOE.
- Standards/Requirements Identification Documents (S/RIDs), sets of "Necessary and Sufficient" and/or "Work Smart" Standards, and DOE facility safety analysis report (SARs) regularly invoke (adopt for use) voluntary consensus standards as the technical basis for facility/organization operations.

Success Indicators – TSP level:

- Program resources are sufficient to actively promote the use of technical standards and support Department access to needed voluntary consensus standards, data sources on successful applications of technical standards (i.e., reference standard approaches), DOE technical standards, and TSP resources/services.
- TSP resources/services are sufficient to participate in (through committee memberships, etc.) or actively support other DOE standards management functions (i.e., DSC, etc.) and key Department initiatives – specifically, implementation of Integrated Safety Management (ISM) principles and work methods.

Success Indicators – Technical Standards Manager (TSM) level:

- TSMs are appointed for every major DOE element (Headquarters organization, operations office, field office, and M&O/prime contractor).
- TSMs hold memberships with other DOE standards management activities (i.e., DSC, etc.), thereby facilitating integration of activities.
- TSMs consult on a regular basis with their local management on the identification and use of standards and supporting TSP resources.
- TSMs are afforded and take advantage of regular opportunities to participate in TSP-sponsored functions (TSMC meetings, program workshops, etc.).

Goal 2

Establish the TSP as the key DOE resource for providing information on technical standards, coordinating and integrating technical standards activities, developing technical standards when needed, and assisting in identifying appropriate technical standards.

- 2.1 Provide briefings to standards users and their managers on the TSP and how to use its services.
- 2.2 Provide an annual forum to communicate worldwide advances in technical standards and standards management approaches.
- 2.3 Provide access (on-line preferred) to technical standards information, including case studies of successful standards applications.

- 2.4 Promote proactive interaction among TSMs and their local organizations. Identify [to line management and Technical Standards Managers Committee (TSMC) chair] documents being developed or used which are (a) duplicative of voluntary consensus standards, (b) DOE-developed and should be managed under TSP processes, or (c) being developed for advanced technology and may be of benefit to a larger community.
- 2.5 Identify applicable information sources through the TSP information resource center (EH Technical Information Services, TIS).

- Information on voluntary consensus standards and DOE technical standards is available to all Department and contractor personnel.
- DOE Order 1300.2A / 252.1 is referenced in all DOE management and operating / integration (M&O / M&I) contracts.
- Other Government agencies and departments team with DOE to host an annual workshop on technical standards and standards management activities. Such workshops foster the dissemination of case studies, good practices, and "lessons learned" from the identification, development, use, and maintenance of technical standards.
- Periodic briefings on the importance of technical standards and TSP services are made available to Department and contractor personnel.

Success Indicators – TSP level:

- Attendance at annual workshops includes standards developers and users from the DOE community, increased senior DOE management participation, and key individuals from other Federal standards management organizations and voluntary standards developers.
- Positive feedback is received from the workshops, and periodic "value added" surveys confirm the usefulness and success of the program in communicating information on technical standards activities.
- On-line (Internet) access to technical standards information, including voluntary consensus standards, is provided, the information maintained is current, and data on program information accessed confirms there is sufficient interest in program products/services to justify continued management (funding) support.

Success Indicators – TSM level:

- Interactions between TSMs and their local line managers occur frequently through information sharing sessions and standards management process briefings.
- The number of technical standards issues handled by TSMs at each site increases in recognition of the TSM's increasingly important role in their organization.
- All TSMs and appropriate site libraries have access to current versions of DOE technical standards.
- PC/Internet communication links permit rapid dissemination of program material/information between the Technical Standards Program Office (TSPO) and TSMs.

Goal 3

Foster closer ties between DOE and the broader standards community (voluntary and Federal) and enhance transfer of knowledge and technical innovation by encouraging DOE participation in consensus standards development, including developing technical standards for DOE.

Strategies:

- 3.1 Assist the DOE community in the identification, selection, and implementation of non-Government (i.e., voluntary consensus) standards.
- 3.2 Increase participation with voluntary standards organizations (i.e., non-Government standards bodies, NGSBs) and Federal standards management activities in the development of technical standards and other related technical standards activities.
- 3.3 Facilitate the commercialization of DOE-developed advanced technologies through the conversion of DOE technical standards (those related to the technology) or development of needed technology-related standards as voluntary consensus standards.

Success Indicators – Department level:

- A DOE Standards Executive (per OMB A-119) is identified by senior Department
 management to represent DOE standards management interests with other Federal
 agencies and voluntary standards organizations. For example, the DOE Standards
 Executive is to serve as a member of NIST's Interagency Committee on Standards
 Policy (ICSP). In addition, the DOE Standards Executive should be a member of (or
 be represented on) the ANSI Board of Directors and Government Member Council.
- Major DOE contractors are ANSI members.
- DOE is an active participant in the annual U.S. celebration of World Standards Day (held in Washington, D.C. each fall).
- The number of voluntary consensus standards adopted for use by DOE increases commensurate with the programs assigned to and managed by the Department.
- DOE participation in voluntary (non-Government) standards development activities is representative of the Department's missions, programs, and interests, and this participation is actively supported by program and line managers. For example, a DOE representative serves on every voluntary standards writing activity (international and national) deemed to be relevant to agency operations.
- Scientific/technical information with commercialization potential (for which the development of DOE or non-Government technical standards would enhance the commercialization process) is identified by line personnel to TSP personnel.

Success Indicators – TSP level:

- Listings of (a) voluntary standards and other documents used by DOE as technical standards, (b) DOE/contractor personnel participating in voluntary standards activities, and (c) DOE topical committee memberships are prepared and made available to interested personnel.
- Formal protocols/processes are established with voluntary standards organizations to support (a) DOE involvement in voluntary consensus standards projects of relevance to DOE, (b) conversion of DOE technical standards to voluntary consensus standards, and (c) reviews by voluntary standards organizations of DOE technical standards under development.
- An annual review of DOE technical standards that are at least five (5) years old facilitates the identification of standards that should be either converted to voluntary consensus standards or canceled due to lack of technical currency or use by DOE organizations.

Success Indicators – TSM level:

- Organization/site business practices reflect the importance placed by management on working with their TSM to record local participations in voluntary standards activities.
- TSMs work with personnel in advanced technology areas to prepare (when considered appropriate) technical standards on the technology to promote its eventual commercialization.
- TSMs have access to electronic media with information on voluntary consensus standards used by their organization/facility and available for consideration of use. In addition, TSMs promote the use of voluntary consensus standards at their sites through the use of Web pages, e-mail, briefings, etc.

Goal 4

Ensure that technical standards reflect the needs of the users.

- 4.1 Effectively coordinate the distribution of draft standards for review and comment.
- 4.2 Seek comments from standards developing organizations and industry on draft DOE technical standards.
- 4.3 Make draft DOE and (to the extent practical) voluntary consensus standards readily accessible to interested parties.
- 4.4 Provide a program information resource center to identify information sources for technical standards.
- 4.5 Work closely with U.S. and international standards bodies to promote harmonizing standards.
- 4.6 Harmonize technical standards processes with those of the DOE Directives System.
- 4.7 Develop processes for screening and assessment of need to help ensure that only needed DOE technical standards are developed.
- 4.8 Provide an automated/electronic posting and comment resolution system that supports timely distribution of draft DOE technical standards and compilation and processing of comments on new or revised DOE technical standards.

- Technical standards (voluntary and DOE) sponsored by DOE are considered satisfactory for meeting the intended need by agency stakeholders (Congress, Defense Nuclear Facilities Safety Board, states, etc.).
- TSP information management capabilities are considered to be at or near the "state-of-the-art" by other Federal agencies.

Success Indicators – TSP level:

- Periodic review of the technical standards development and maintenance processes reveals that coordination practices are effective.
- DOE "topical" committees exist, and these committees serve as a program resource to address cross-cutting standards development and application issues in the specific technical focus area of the topical committee.
- An on-line review/comment/comment resolution capability for draft technical standards is made available and maintained by the TSP information resource center.
- The cycle time for distributing draft technical standards documents and consolidating/resolving reviewer comments is consistent with the needs of the users of the standards under development.
- Comments on draft DOE technical standards are being satisfactorily addressed by Preparing Activities.
- High performance ratings on periodic customer needs surveys imply customer satisfaction.

Success Indicators – TSM level:

- TSMs are recognized as the TSP's "customer service representative" for their site/organization. As such, needs of standards users are routinely communicated to the TSMs for review/action.
- TSMs and their local technical libraries have access to all current DOE technical standards.
- TSMs actively support the DOE topical committees chaired by individuals in their organization.

Goal 5

Ensure that TSP activities promote enhancements to worker safety and health, safe and reliable facility operations, and the protection of the environment. Consequently, the TSP is viewed as adding value to the missions of the Department.

- 5.1 Establish and apply criteria to verify the need for a technical standard prior to initiating its development.
- 5.2 Develop a mechanism to quantify enhancements to worker safety/health, facility safety, and environmental protection for all technical standards implemented within the DOE community.
- 5.3 Develop and employ metrics for estimating the costs and resources required to prepare, publish and maintain DOE technical standards.
- 5.4 Develop and employ metrics for estimating cost savings (or cost avoidances) due to the use of technical standards.

- DOE-specific technical standards are viewed as truly limited to addressing Department needs and, as such, not redundant to existing voluntary consensus standards.
- Enhancements to the safety and health of facility workers, safety and reliability of facility operations, and protection of DOE site environmental surroundings are attributed to the proper use of technical standards.
- Cost savings (or cost avoidances) from the use of technical standards are acknowledged by senior DOE management.

Success Indicators – TSP level:

- The criteria for screening proposed technical standards projects (TSPP-2) is used by line DOE management in the evaluation of projects.
- Enhancements are quantified and published in appropriate TSP documents.
- Metrics are established and make available to TSP stakeholders through program documents and databases.
- Case studies demonstrate the cost benefit in using technical standards.

Success Indicators – TSM level:

• TSMs are involved in all phases of these activities (project screening, identification of enhancements, documentation of case studies, etc.).